SE97 Add-On Intercept: Overview

Fishery managers are required by law to report the economic consequences of their decisions regarding the allocations of limited fish resources between commercial and recreational fishing sectors. High quality economic data are needed to evaluate the economic claims of constituents and to resolve potential political conflicts between the commercial and recreational fishing constituents as they compete for the limited fish resources. However, fishery managers do not currently have access to much economic information about recreational fisheries. This study intends to help fill the data and research gaps in our knowledge of the economics of marine recreational fishing.

Our objectives, broadly characterized, are twofold. The first is to collect social and economic data on the people who participate in marine recreational fishing in the various regions of the continental United States. Second, these data will be used to estimate statistical models of the demand for marine recreational fishing for seven to nine regionally selected species that are highly sought by marine recreational anglers and are either currently managed by the Fishery Management Councils and/or the Interstate Marine Fisheries Commissions, or are expected to come under management in the near future. For example, the 1994 Supplemental Economic Survey conducted in the Northeast Region as an add-on to the Marine Recreational Fisheries Statistics Survey (MRFSS) asked about bluefish, striped bass, summer flounder, Atlantic cod, black sea bass, tautog, scup, and weakfish (scup was targeted in the North Atlantic and weakfish in the Middle Atlantic).

The species-specific demand models (travel cost models and random utility models) will be specified to begin to answer questions about the economic value of or costs of two common forms of regulations imposed on anglers: (1) participation and access and (2) changes in catch (e.g., creel limits, catch and release, minimum size). In keeping with the state of the art in recreational demand modeling, the demand models will be estimated as being contingent on the choice to go marine recreational fishing and the choice of target species. This study will not estimate economic impact statistics, including multiplier effects for regional income or employment. Although, some of the data we collect could be used by others for this purpose (particularly data on anglers' expenditures), credible regional economic impact analysis requires an entirely different survey methodology. The focus of this large scale data collection and research project will be on the economic valuation of marine recreational fishing and catches by anglers.

Add-On Economic Intercept Survey Instrument

The economic intercept survey of anglers was designed as an addition to the usual MRFSS intercept survey. The economic questionnaire solicited social and economic data about trip duration, travel costs, distance traveled, and on-site expenditures associated with the intercepted trip; these data will be used to develop angler or trip profiles and in the development of statistical behavioral models to estimate values associated with recreational saltwater fishing for particular finfish species

The contractor asked the economic add-on questions at the end of the routine MRFSS verbal questions and before examining the catch. This was not done if it would decrease the interviews where the catch is examined. If it did not affect the examination of the catch, this ordering could improve the flow of the interview and the response rates. Anglers were not told these were additional questions; rather the add-on would appear to be a normal part of the MRFSS survey. All this was done to improve the overall response rate and general receptiveness of the target respondents.

Questionnaires were administered to anglers who are at least 16 years of age (regardless of target species), and who complete all MRFSS **key** data items preceding the catch inspection questions. The intercept survey requires that all interviews, except for a limited number of beach/bank shore mode interviews, be conducted with anglers who have <u>completed</u> their fishing trips.

Interview Justification

Each item in the intercept survey will be used for at least one of two purposes. Every item can be used to develop a descriptive understanding of anglers and fishing trips. A subset of these items will also be used

in the development of economic models to estimate the value of saltwater recreational fishing in each Region. Information from individuals not targeting the selected species can be used to develop separate angler and trip profiles and as a potential way in which angler participation rates may be incorporated into the economic valuation model. In addition, by collecting information on individuals not targeting these species, sample statistics can be used to test for any sample selection biases that may be created by focusing only on a subset of species targeted by anglers. Lastly, information collected from anglers not willing to release their name and phone number will be used to test for statistical differences between them and anglers willing to release this information.

Data Sets

Data sets can be obtained by contacting the National Marine Fisheries Service, Science and Technology division.

Administrative Statistics

- 93.5% of intercepted anglers were older than 16 years.
- Of those eligible to respond, 96% responded to the economic add-on questions
- 76% of those responding agreed to respond to all questions and agreed to be contacted for the telephone follow-up survey.
- Likewise, 24% refused to answer at least 1 question

Table 5: Completed Assignments including visits to alternate sites categorized according to the reason given for leaving the assigned site.

1997	Comp	leted												
	Assign	ments		Reason for Lo					aving Assigned Site					
		Alt							Tourn	Couldn't				
		Sites	No Activity		<8 in	<8 will	None	Made	Weigh	Find	MRFSS	Other	Asked to	
	Total	Visited	Weather	Other	Mode	Finish	Remain	Quota	Station	Site	Intervwr	Intervwr	Leave	Other
South Atlantic	2995	1338	341	428	319	17	67	4	5	5	50	7	1	94
Gulf Region	2184	1000	253	370	240	21	22	23	5	0	2	6	4	54
South East	5179	2338	594	798	559	38	89	27	10	5	52	13	5	148

Table 6: Eligible anglers encountered but not completely interviewed, ineligible anglers encountered in the target mode, and the estimated number of eligible anglers missed in the target mode.

1997	Anglers Not Completely										
	Interviewed				Ineligible Anglers Encountered						
	Initial	Language	Key Item		Not	Not	Not	Not	Not	Not 5	Eligible
	Refusal	Barrier	Refusal	Total	Done	U.S.	Recr	Salt	Finfish	Years	Anglers
South	539	178	138	855	15573	3	1009	96	2669	134	13943
Atlantic											
Gulf Region	1901	196	379	2476	11609	0	1289	401	4329	212	7787
South East	2440	374	517	3331	27182	3	2298	497	6998	346	21730